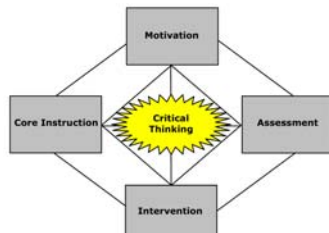


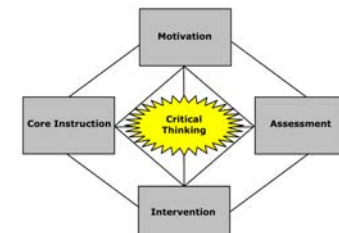
School Effectiveness
K-12 Literacy

**The Arizona Department of Education
Comprehensive Literacy Framework**



Critical Thinking

Training in critical thinking
should be the primary task of education.
~ Michael Scriven ~



"The fundamental characteristic of the world students now enter is ever-accelerating change; a world in which information is multiplying even as it is swiftly becoming obsolete and out of date; a world in which ideas are continually restructured, retested, and rethought; where one cannot survive with simply one way of thinking; where one must continually adapt one's thinking to the thinking of others; where one must respect the need for accuracy and precision and meticulousness; a world in which job skills must continually be upgraded and perfected—even transformed. We have never had to face such a world before. Education has never before had to prepare students for such dynamic flux, unpredictability, and complexity; for such ferment, tumult, and disarray" (Paul). If students are to survive in the 21st century, much less excel in it, they must be able to raise vital questions; gather, interpret, and assess relevant information while reasoning through to a logical conclusion; test their conclusions against relevant criteria and standards; think open-mindedly within alternative systems of thought; and communicate effectively (Paul, et al). In short, students must be able to think critically.

Critical thinking is a complex integrative process that requires intense intellectual focus, direct instruction, and continual practice. "It is not true that we are naturally endowed with the ability to think clearly and

logically—without learning how, or without practicing...for nobody assumes that any game is so easy that we are all first-class players *naturally*...(Mander).

Current research acknowledges the complexity of the thinking process and supports an integrated approach to teaching critical thinking, one that recognizes “that we must teach content through thinking, not content, and then thinking;” one that models “the thinking that students need to formulate if they are to take ownership of the content” (Paul, et al); and one that uses the opportunities already existing in the classroom and the curriculum by developing the connection between literacy and thinking.

The Arizona Department of Education supports the idea that one of the goals of education is to promote “a love of thinking, an ability to reflect on one’s thinking and be open to new ideas, an interest in contributing one’s thinking to help others and to improve society, and the courage to think through the most difficult and complex problems” (Berman, 1991). With this goal in mind, the Comprehensive Literacy Framework addresses the teaching of critical thinking at grades K-3 and at grades 4-12 by providing

- current research
- strategies for teachers
- an annotated bibliography of professional articles
- professional development opportunities
- links to relevant ADE resources

Sources:

Berman, Sheldon. “Thinking in Context: Teaching for Open-Mindedness and Critical Understanding.” Developing Minds: A Resource Book for Teaching Thinking. Arthur Costa, Ed., 1991: 11- 17.

Foundation for Critical Thinking. “The Critical Thinking Community,” 2007. <<http://www.criticalthinking.org/>>.